



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,555	11/21/2003	Jon P. Zogg	245725US26	8474
22850	7590	04/05/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			BRASE, SANDRA L	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/717,555

Applicant(s)

ZOGG ET AL.

Examiner

Sandra L. Brase

Art Unit

2852



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because figures 5-9 are too dark and illegible. Applicant is required to submit new figures 5-9 that are capable of being read and their content easily determined. (M.P.E.P. 608.02). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities.

On page 7, line 15, and on page 8, line 13, “60, 62” should be changed to “60 and 62”.

Art Unit: 2852

On page 7, line 16, "52, 54" should be changed to "52 and 54".

On page 7, lines 17, 19 and 20, "60a, 62a" should be changed to "60a and 62a".

On page 7, lines 18 and 25, and on page 8, line 8, "60b, 62b" should be changed to "60b and 62b".

On page 10, lines 22 and 24, "82, 84" should be changed to "82 and 84".

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2852

5. Claims 1-3, 5, 6, 9-17, 19 and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, II (US 6,785,489) in view of Kawai (US 6,029,019).

6. Anderson, II (...489) discloses an image forming apparatus including a photosensitive drum assembly comprising: a drum (3) defining first and second open ends (figure 1); a flange (6) partially disposed in the first open end (figure 1); and a grounding plate assembly comprising a planar portion (12) and a drum contact member (17) and a shaft contact member (19), the drum contact member configured to remove an electrically resistive coating from an interior of the drum (col. 5, lines 1-17), and the shaft contact member configured to contact a grounding shaft (22) (col. 5, lines 20-34). The shaft (22) is disposed through a void (10) defined in the flange (col. 5, lines 21-24), where the shaft and the grounding plate providing a grounding path for the interior of the drum (col. 5, lines 1-34). The grounding plate comprises a plurality of drum contact members (17) (figures 2-6), where the drum contact members are configured to remove the electrically resistive coating (col. 5, lines 1-17). The grounding plate comprises a conductive plate (12) and a plurality of drum contact members (17) radially protruding from an outer periphery of the conductive plate (figures 2-6). The plurality of drum contact members comprise eight circumferentially spaced drum contact members (17) (figures 2-4). The plurality of drum contact members (17) of the grounding plate are bent relative to the planar portion (col. 4, lines 52-59; col. 5, lines 5-10; and figures 2-6). The shaft contact member (19) is bent (col. 4, lines 59-67; col. 5, lines 20-34; and figures 2-6). The grounding plate comprises a plurality of shaft contact members, where the number of shaft contact members can be two (col. 4, lines 59-64; and figures 2-6). The flange comprises a plastic (col. 4, lines 17-18) and the grounding plate comprises a metal (col. 4, lines 27-32). Anderson, II (...489) do not disclose the claimed

Art Unit: 2852

placement of the shaft contact members, and the flange comprising the claimed gear surface.

Kawai (...019) discloses an image forming apparatus including a photosensitive drum assembly comprising: two shaft contact members (B) configured to contact a shaft (36), where the shaft contact member is disposed entirely within an interior of a flange disposed in an open end of the drum (figure 6). The free ends of the two shaft contact members are disposed between a surface of the interior of the flange and a planar surface of a grounding plate (figure 6). The flange comprises a gear surface (A1) (col. 5, lines 53-56; and figure 6). The gear surface is formed on a portion that is disposed outside of the drum (figure 6). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed placement of the shaft contact members, as disclosed by Kawai (...019), since such a placement is well known in the art for members that contact a shaft in a drum assembly. It would have also been obvious to one of ordinary skill in the art at the time of the invention to have the flange comprise the claimed gear surface, as disclosed by Kawai (...019), since it is well known in the art to have such a placement of a gear so as to drive a photosensitive drum.

7. Claims 4, 7, 8, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, II (US 6,785,489) in view of Kawai (US 6,029,019) as applied to claims 3, 6, 17 and 19 above, and further in view of Zogg et al. (US 5,845,173).

8. Anderson, II (...489) in view of Kawai (...019) disclose the features mentioned previously, but do not disclose that one of the drum contact members have a length longer than another drum contact member, and the long drum contact member disposed adjacent a recess of a flange. Zogg et al. (...173) disclose a drum assembly including a plurality of drum contact

Art Unit: 2852

members on a grounding plate, where one drum contact member (101 or 102) is longer than another drum contact member (103, 104, 105 or 106)(col. 7, lines 24-33), and this long drum contact member is adjacent a recess defined in a flange (82 or 84) of the drum (col. 6, lines 31-39; col. 7, lines 24-33; and figure 6). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the length of one of the drum contact members be longer than others and to have the long drum contact member be adjacent to a recess in the flange, as disclosed by Zogg et al. (...173), since such a long drum contact member adjacent to a recess in a flange provides that the grounding plate is able to accommodate for the possibility of additional deflection.

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zogg et al. (US 5,845,173) in view of Kawai (US 6,029,019).

10. Zogg et al. (...173) disclose a photosensitive drum assembly for an image forming apparatus, comprising: a drum (50) defining first and second open ends (figures 3 and 4); a flange (60) partially disposed in the first open end; and a grounding plate (70) assembly comprising a plurality of drum contact members (101-106) and a shaft contact member, one of the drum contact members being longer than another drum contact member (col. 7, lines 24-33), and the shaft contact member (70) configured to contact a grounding shaft (64). Kawai (...019) discloses an image forming apparatus including a photosensitive drum assembly comprising: shaft contact members (B) configured to contact a shaft (36), where the shaft contact member is disposed entirely within an interior of a flange disposed in an open end of the drum (figure 6). It would have been obvious to one of ordinary skill in the art at the time of the invention to have

Art Unit: 2852

the claimed placement of the shaft contact members, as disclosed by Kawai (...019), since such a placement is well known in the art for members that contact a shaft in a drum assembly.

### ***Prior Art***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kita (US 5,210,574), Ikehara (US 5,729,792), Kawaguchi et al. (US 5,953,562), Ikehara (US 6,006,053), Miyamoto et al. (US 6,167,219), Saitoh et al. (US 6,249,661) and Cais et al. (US 6,771,915) disclose a grounding device for grounding a drum.

### ***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is (571) 272-2131. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

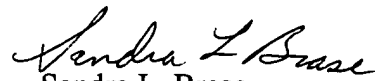
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley, can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR



Art Unit: 2852

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sandra L. Brase  
Primary Examiner  
Art Unit 2852

April 4, 2005